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EXAMINER	
FLEARY, CAROLYN FATIMAH	
ART UNIT	PAPER NUMBER
2152	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,729

Applicant(s)

MATTHEWS ET AL.

Examiner

Carolyn F. Fleary

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date May 30, 2002
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. GB 0117464.8, filed on 7/18/2001.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-15, and 17-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (US 5,938,722).

In regards to claim 1 Johnson discloses a data processing method for running on a data processing host in a data processing system, the data processing system comprising a plurality of data processing hosts(fig. 13a-13k), the method comprising the steps of:

- maintaining a host information repository (i.e. Configurable list, Qualifile, col. 7 lines 10-12) comprising host information for each of two or more of the plurality of data processing hosts, the host information comprising details relating to host configuration (col. 1 lines 32-34, col. 6 lines 22-41);
- obtaining program requirements (i.e. predicate, Qualifile) comprising details relating to host configuration required for executing a program (col. 3 lines 25-29, col. 6 lines 22-24, 26-41));

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- identifying from the host information repository (i.e. Configurable list) according the obtained program requirements one or more data processing hosts capable of executing the program (col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10); and
- causing execution of the on one of the one or more data processing hosts program identified as capable of executing the program (col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10)

In regards to claim 2 Johnson discloses a method as claimed in claim 1 further comprising the step receiving the host information for a data processing host in a message sent from the data processing host (col. 6 lines 54-59, col. 7 lines 4-7).

In regards to claim 3 Johnson discloses a method as claimed in claim 1 wherein the host information further comprises details relating to host state (i.e. exceeding on not exceeding performance constraints, col. 9 lines 48-52).

In regards to claim 4, Johnson discloses a method as claimed in claim 1 wherein the

- the program requirements further comprise details relating to one or more host configurations required for the program to communicate with (col. 3 lines 25-29, col. 6 lines 22-24, 26-41);
- the identifying step further identifying one or more data processing hosts suitable for the program to communicate with (col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10); and
- the causing step further making the program aware of one or more data processing hosts suitable ((i.e. building of the Qualifile), for it to communicate with (col. 7 lines 16-21).

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In regards to claim 5, Johnson discloses a method as claimed in claim 1 further comprising the steps of:

- receiving (i.e. Source Receives) a program execution policy comprising a subset of program requirements(col. 3 lines 25-29, col. 6 lines 22-24, 26-41);
- identifying from a program repository comprising program requirements for a plurality of programs one or more programs with program requirements which comprise the program execution policy(fig 2. col. 3 lines 66-67 col. 4 lines 1-5,30-32, col. 5 lines 63-67, col. 6 lines 8-19); and
- repeating the obtaining, identifying one or more data processing hosts capable of executing the program, and causing steps for each of the one or more programs with program requirements which comprise the program execution (col. 1 lines 63-67. col. 2 lines 1-7)

In regards to claim 6, Johnson discloses a method as claimed in claim 1 further comprising the steps of:

- receiving (i.e. Source Receives) a host execution policy (i.e. local candidate configuration) comprising a subset of host information (col. 6 lines 58-59,61-67) ;
- identifying (col. 7 lines 4-7,10-15) from the host repository (i.e. Qualifile) one or more data processing hosts with host information which comprises the host execution policy; and
- repeating the obtaining, identifying one or more data processing hosts capable of executing the program, and causing steps for a plurality of programs (col. 1 lines 63-67. col. 2 lines 1-7, col. 9 lines 48-53)

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- wherein identifying one or more data processing the hosts capable of executing the program step considers only the one or more data processing hosts with host information which comprises the host execution policy (col. 9 lines 48-57).

In regards to claim 7, Johnson discloses, a method as claimed in claim 1 wherein program requirements further comprise one or more other programs and wherein the method further comprises the step of:

- Repeating the obtaining, identifying one or more data processing hosts capable of executing the program (col. 1 lines 63-67, col. 2 lines 1-7, col. 9 lines 48-53), and
- causing steps for each of the other programs identified in the program requirements (col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10)

In regards to claim 9 Johnson discloses a computer program product recorded on a computer readable medium (fig 1-13) said program product comprising instructions which, when executed on a data processing host (fig 1-13a-k) in a data processing system comprising a plurality of data processing hosts, cause said host to carry out a method comprising the steps of:

- maintaining a host information repository (i.e. Configurable list, Qualifile, col. 7 lines 10-12) comprising host information for each of two or more of the plurality of data processing hosts, the host information comprising details relating to host configuration (col. 1 lines 32-34, col. 6 lines 22-41);
- obtaining program requirements (i.e. predicate, Qualifile) comprising details relating to host configuration required for executing a program (col. 3 lines 25-29, col. 6 lines 22-24, 26-41));

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- identifying from the host information repository (i.e. Configurable list) according the obtained program requirements one or more data processing hosts capable of executing the program (col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10); and
- causing execution of the program on one of the one or more data processing hosts identified as capable of executing the program (col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10)

In regards to claim 10 Johnson discloses a computer program product as claimed in claim 9, wherein the method further comprises the step of:

- receiving the host information for a data processing host in a message sent from the data processing host (col. 6 lines 54-59, col. 7 lines 4-7).

In regards to claim 11 Johnson discloses a computer program product as claimed in claim 9 wherein:

- the host information maintained in the host information repository further comprises details relating to host state (col. 9 lines 48-52).

In regards to claim 12, Johnson discloses McNally et al. discloses computer program product as claimed in claim 9 wherein the

- the program requirements further comprise details relating to one or more host configurations required for the program to communicate with (col. 3 lines 25-29, col. 6 lines 22-24, 26-41);
- the identifying step further identifying one or more data processing hosts suitable for the program to communicate with(col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10); and

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- the causing step further making the program aware of one or more data processing hosts suitable ((i.e. building of the Qualifile), for it to communicate with (col. 7 lines 16-21).

In regards to claim 13, Johnson discloses a computer program product as claimed in claim 9, wherein the method further comprises the steps of:

- receiving (i.e. Source Receives) a program execution policy comprising a subset of program requirements(col. 3 lines 25-29, col. 6 lines 22-24, 26-41);
- identifying from a program repository comprising program requirements for a plurality of programs one or more programs with program requirements which comprise the program execution policy(fig 2. col. 3 lines 66-67 col. 4 lines 1-5,30-32, col. 5 lines 63-67, col. 6 lines 8-19); and
- repeating the obtaining, identifying one or more data processing hosts capable of executing the program, and causing steps for each of the one or more programs with program requirements which comprise the program execution (col. 1 lines 63-67. col. 2 lines 1-7)

In regards to claim 14, Johnson discloses a computer program product as claimed in claim 9, wherein the method further comprises the steps of:

- receiving (i.e. Source Receives) a host execution policy (i.e. local candidate configuration) comprising a subset of host information (col. 6 lines 58-59,61-67) ;
- identifying (col. 7 lines 4-7,10-15) from the host repository (i.e. Qualifile) one or more data processing hosts with host information which comprises the host execution policy; and

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- repeating the obtaining, identifying one or more data processing hosts capable of executing the program, and causing steps for a plurality of programs (col. 1 lines 63-67, col. 2 lines 1-7, col. 9 lines 48-53)
- wherein identifying one or more data processing the hosts capable of executing the program step considers only the one or more data processing hosts with host information which comprises the host execution policy (col. 9 lines 48-57).

In regards to claim 15, Johnson discloses a computer program product as claimed in claim 9 wherein the method further comprises steps of:

- Repeating the obtaining, identifying one or more data processing hosts capable of executing the program (col. 1 lines 63-67, col. 2 lines 1-7, col. 9 lines 48-53), and
- causing steps for each of the other programs identified in the program requirements (col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10)

In regards to claim 17 Johnson discloses a data processing system comprising a plurality of data processing hosts wherein at least one data processing host comprises:

- maintaining means for maintaining a host information repository (i.e. Configurable list, Qualifile, col. 7 lines 10-12) comprising host information for each of two or more of the plurality of data processing hosts, the host information comprising details relating to host configuration (col. 1 lines 32-34, col. 6 lines 22-41);

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- obtaining means for obtaining program requirements (i.e. predicate, Qualifile) comprising details relating to host configuration required for executing a program (col. 3 lines 25-29, col. 6 lines 22-24, 26-41));
- host identifying means for identifying from the host information repository (i.e. Configurable list) according the obtained program requirements one or more data processing hosts capable of executing the program (col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10); and
- execution means for causing execution of the program on one of the one or more data processing hosts identified as capable of executing the program (col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10).

In regards to claim 18 Johnson discloses a system as claimed in claim 17 further comprising:

- receiving the host information for a data processing host in a message sent from the data processing host (col. 6 lines 54-59, col. 7 lines 4-7).

In regards to claim 19 Johnson discloses a system as claimed in claim 17 wherein:

- the host information maintained in the host information repository further comprises details relating to host state (col. 9 lines 48-52).

In regards to claim 20 Johnson discloses a system as claimed in claim 17 wherein

- program requirements further comprise details relating to one or more host configurations required for the program to communicate with (col. 3 lines 25-29, col. 6 lines 22-24, 26-41);
- the host identifying means is further operable to identify one or more data processing hosts suitable for the program to communicate with(col. 1 lines 38-40, col. 3 lines 11-12, col. 6 lines 22-67, col. 7 lines 4-10);

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- the execution means is further operable to make the program aware one or more data processing hosts suitable for it to communicate with(col. 3 lines 11-12, col. 7 lines 56-60, col. 8 lines 4-10).

In regards to claim 21 McNally et al. discloses a system as claimed in claim 17

- means for receiving a program execution policy comprising a subset of program requirements (i.e. Source Receives, col. 3 lines 25-29, col. 6 lines 22-24, 26-41); and
- means for identifying from a program repository comprising program requirements for a plurality of programs one or more programs with program requirements which comprise the program execution policy(fig 2. col. 3 lines 66-67 col. 4 lines 1-5,30-32, col. 5 lines 63-67, col. 6 lines 8-19);
- wherein the obtaining means, host identifying means, and execution means are operable for each of the plurality of programs, which comprise the program execution policy(col. 1 lines 63-67. col. 2 lines 1-7, col. 9 lines 48-53)

In regards to claim 22, Johnson discloses a computer program product as claimed in claim 9, wherein the method further comprises the steps of:

- means for receiving (i.e. Source Receives) a host execution policy (i.e. local candidate configuration) comprising a subset of host information (col. 6 lines 58-59,61-67) ;
- means for identifying (col. 7 lines 4-7,10-15) from the host repository (i.e. Qualifile) one or more data processing hosts with host information which comprises the host execution policy; and
- wherein the obtaining means, host identifying means, and execution means are operable for each of the plurality of programs, (col. 1 lines 63-67. col. 2 lines 1-7, col. 9 lines 48-53)

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- wherein the host identifying means is operable to consider only the one or more data processing the hosts with host information, which comprises the host execution policy (col. 9 lines 48-57).
- In regards to claim 23, Johnson discloses a system as claimed in claim 17 wherein program requirements further comprise one or more other programs and wherein obtaining means, host identifying means, and execution means are operable for each of the other programs identified in the program requirements. Johnson teaches a program may consist of other programs that will operate during the execution of the program by a host. During execution the host determines if the other programs can be executed. If the other programs cannot be executed on the current host, other host is identified which are suitable to execute the other programs (col. 9 lines 30-37,62).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 8,16 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 5,938,722) in view of Silva et al. (US 6,360,268).

In regards to claim 8, Johnson discloses a method as claimed in claim 1 .

Johnson fails to teach wherein the program is for testing a product installed one or more of the plurality of data processing hosts.

Silva et al. further discloses a method as claimed in claim 1 as modified above, wherein the program is for testing a product (i.e. test machine col. 4 lines 66-67, col. 5 lines 5) installed one or more of the plurality of data processing hosts.

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Johnson et al. By having program for testing a product, as taught by Silva et al., in order to render the system extremely adaptable and flexible as well as being able accommodate the automatic testing of software and hardware across multiple machines by a plurality of users in an distributed environment (See Silva col. 1 lines 28-41 col.3 lines 10-16, 39-54, col. 18 lines 1-13).

In regards to claim 16, Johnson discloses a computer program product as claimed in claim 9:

Johnson fails to teach wherein the program is for testing a product installed one or more of the plurality of data processing hosts.

Silva et al. further discloses a method as claimed in claim 1 as modified above, wherein the program is for testing a product (i.e. test machine col. 4 lines 66-67, col. 5 lines 5) installed one or more of the plurality of data processing hosts.

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Johnson et al. By having program for testing a product, as taught by Silva et al., in order to render the system extremely adaptable and flexible

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as well as being able accommodate the automatic testing of software and hardware across multiple machines by a plurality of users in an distributed environment (See Silva col. 1 lines 28-41 col.3 lines 10-16, 39-54, col. 18 lines 1-13).

In regards to claim 24, Johnson discloses a system as claimed in claim 17:

Johnson fails to teach wherein the program is for testing a product installed one or more of the plurality of data processing hosts.

Silva et al. further discloses a method as claimed in claim 1 as modified above, wherein the program is for testing a product (i.e. test machine col. 4 lines 66-67, col. 5 lines 5) installed one or more of the plurality of data processing hosts.

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Johnson et al. By having program for testing a product, as taught by Silva et al., in order to render the system extremely adaptable and flexible as well as being able accommodate the automatic testing of software and hardware across multiple machines by a plurality of users in an distributed environment (See Silva col. 1 lines 28-41 col.3 lines 10-16, 39-54, col. 18 lines 1-13).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Workload Distribution on a Network

- Florman (US 6377975) Methods and Systems to Distribute Client Software Tasks Among a Number of Servers

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- Leymann et al. (US 6681251) Workload Balancing in Clustered Application Servers
- Jindal et al. (US 6327622) Load Balancing In a Network Environment

Execution of Process in Distributed Systems

- Ando (US 6678715) Systems and Apparatus for Switching Execution of a Process in a Distributed System
- Andrew G. et al. (US 5699518) System for selectively setting a server node, evaluating to determine server node for executing server code, and downloading server code prior to executing if necessary

Transmission of information to Devices on a Network

- Dobberpuhl et al. (US 6754718) Pushing Attribute Information to Storage Devices for Network Topology Access
- Dikey et al. (US 5881236) System for Installation of Software on a Remote Computer System Over a Network Using Checksums and Password Protection

Device Discover on a Network

- Duursma et al. (US 6643690) Apparatus and Method for Determining a Program Neighborhood for a Client Node in a Client-Server Network
- McNally et al. (US 6,549, 932) System, Method and Computer Program Product for Discovery in a Distributed Environment

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn F. Fleary whose telephone number is (571) 572-7218. The examiner can normally be reached on 8:30 - 4:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carolyn F Fleary
Examiner
Art Unit 2152

CFF


GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
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